



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,194	06/25/2003	Mark J. Radcliffe	MSI-1547US	5791
22801	7590	10/24/2006	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			CRABTREE, JOSHUA DAVID	
			ART UNIT	PAPER NUMBER
			3714	
DATE MAILED: 10/24/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,194

Applicant(s)

RADCLIFFE ET AL.

Examiner

Joshua D. Crabtree

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13-21, 23-29 and 31-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-21, 23-29 and 31-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. In response to the amendment dated 9/25/2006; claims 11, 12, 22, 30 cancelled; claims 1-10, 13-21, 23-29, 31-48 pending.
2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 9, 10, 13, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Qian et al. (US 2002/0193895).

Qian et al. disclose an enhanced encoder for synchronizing multimedia files into an audio bit stream.

With regard to claim 9 and the limitation of receiving a request to play an audio file, Qian et al. disclose menu options in which audio files are requested (See Fig. 2f).

With regard to the limitation of lyric segments having associated time codes, wherein each time code identifies a time during playback of the audio file that a corresponding lyric segment is displayed, Qian et al. disclose "The interface may then synchronize the at least one multimedia file with the audio file, and when the multimedia file includes lyrical data, synchronize the lyrical data with the voice recording in accordance with the syllables tags. Such that the synchronizing generates an intermediate file that includes for each multimedia file at least one corresponding time stamp to indicate the position and time for where the multimedia file is to be synchronized within the audio file." (See Abstract)

With regard to the limitation of playing the audio file and displaying the first lyric segment as the audio file plays, Qian et al. disclose this in Fig. 3.

With regard to the limitations of receiving a request to jump to a different part of the audio file, and playing the different part of the audio file, Qian et al. disclose this feature (Paragraph [0051]).

With regard to the limitation of displaying the first lyric segment until a time during playback of the audio file matches a time code in the different part of the audio file, and then displaying a different lyric segment associated with the time code in the different part of the audio file, Qian et al. disclose synchronizing lyrics with an audio file (Paragraph [0007]). The lyrics are time stamped to correspond to a position in the wav file. Therefore, when a different portion of the audio file is played, the corresponding lyrics for that portion will be displayed as well.

With regard to claim 10 and the limitation of playing the audio file, Qian et al. disclose this can be accomplished via a Play button (Paragraph [0050]).

With regard to the limitation of identifying a time code associated with a current playback location, Qian et al. disclose this feature (Paragraph [0007]).

With regard to the limitations of identifying the first lyric segment associated with the identified time code, and displaying the first lyric segment until the time code in the different part of the audio file is reached, Qian et al. disclose that the display of the lyrics is synchronized with the audio file (Paragraph [0007]).

With regard to claim 13, Qian et al. disclose, "the interface includes the ability to encode the audio file with the at least one multimedia file to generate a single audio bit stream, wherein the encoding uses the intermediate file to position and encode the at least one multimedia file with the audio file such that a single audio bit stream is generated that includes embedded synchronized multimedia files." (See Abstract)

With regard to claim 14, Qian et al. disclose, "the computer system being used to implement the enhance encoder functions or retrieved from the Internet" (See Paragraph [0062]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama (JP04013288A) in view of Ando et al. (US 2002/0159757).

Aoyama discloses a karaoke device, which is designed to “notify many people, even a primary school pupil who cannot read Chinese characters (KANJI) or a foreigner who cannot understand Japanese, of the lyrics of popular songs, etc., to enjoy the KARAOKE (orchestration without lyrics) with superimposed lyric lines by storing the lyrics data with plural kinds of characters and controlling this lyrics data by switching.”
(See Abstract)

With regard to the limitation of identifying a preferred language for displaying lyrics associated with an audio file, Aoyama discloses, “Lyrics storage means are provided to store the lyrics data with plural kinds of character, a switch operating means is to select a kind of an arbitrary character from plural kinds of characters, and selection control means are to output the designated kind of the lyrics data by this switch operating means after selecting from the lyrics storing means to display the lyrics of a kind of a character specified by a singer on a display. Thus, the selected kind of character, for example, the lyrics written in a cursive form of the Japanese syllabary writing (HIRAGANA), square form of the Japanese syllabary writing (KATAKANA), or English can be displayed on the display device. Many people can enjoy the KARAOKE

by displaying the lyrics of songs in the kind of character corresponding to the singer.”

(See abstract; see also Figs. 1-3).

With regard to the limitation of searching a list of lyric sets associated with the audio file to determine whether the lyric set is available in the preferred language and the preferred sublanguage, Aoyama discloses that the user may search a list, which includes languages and sublanguages, as described above.

With regard to the limitation of identifying an alternate lyric set to be displayed based on a hierarchical list of language priorities provided by a lyric synchronization module, Aoyama discloses allowing the user to select a preferred language from a plurality of languages, as described above. Aoyama discloses ordering the languages in an order, beginning with Chinese, then two forms of Japanese, and then English (See 24 in Fig. 2). Aoyama discloses that Chinese is the first language available, and that the two forms of Japanese are available to those who cannot read Chinese. English lyrics are further available for those cannot read Chinese or Japanese (Page 7: Paragraph 3).

Aoyama does not disclose indicating that a lyric set is unavailable in the preferred sublanguage. Ando et al. teach a device usable in karaoke applications (Paragraph [0002]). Ando et al. teach the feature of a warning display indicating that a language is unavailable (Paragraphs [0120 - 0123]; Item 101c in Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Ando et al. into the invention of Aoyama in order to provide an indication to the user that a language is unavailable. This way, if the user selects a language which turns out

to be unavailable, the user is alerted to this fact. Otherwise, the user might not see any lyrics, and assume that there is a malfunction in the device.

With regard to the limitation of playing the audio file and displaying the alternate lyric set, Aoyama discloses that the any of the three mentioned lyric sets may be displayed, as described above.

With regard to claim 3, and the limitation of storage of an alternate lyric set separately from an audio file. Aoyama discloses, "Lyrics storage means are provided to store the lyrics data" (See abstract). Therefore, all lyrics sets, whether primary or alternate, are stored separately from the audio file.

With regard to claim 8, Aoyama discloses a computer memory (See "RAM", Fig. 1), a flowchart for a computer program (See Fig. 3), and a processor (See "CPU", Fig. 1).

6. **Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama (JP04013288A) in view of Ando et al., as applied above, and further in view of Baker (US 2005/0162551).**

With regard to claim 7, Aoyama discloses two varieties of the same language (Japanese), hiragana and katakana in Fig. 2. Aoyama, as modified by Ando, does not specifically disclose regional dialects of a language. Baker teaches a closed-captioning system in which a plurality of regional dialects may be used for captioning. Baker teaches that implementing this feature would merely require adding captions to a caption database (Paragraph [0015]). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Baker into the

invention of Aoyama, as modified by Ando, in order to provide a karaoke system that is not only capable of showing lyrics in two forms of a language, but also in different regional dialects as well. Although the system of Baker does not show the use of regional dialect-specific captioning within a karaoke application, Baker teaches that such a feature is commonly used to provide text on a screen in for users with different regional dialects. Given this teaching it is clear that regional dialect-specific captioning, for the purpose of allowing a user to view text in a specific dialect, was well known at the time of applicant's invention. Given this, one of ordinary skill in the art seeking to provide a user of a karaoke device supporting multiple languages, such as the one of Aoyama., the advantage of having regional dialect-specific captioning, would have been motivated to seek the outside source as a solution to the problem.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama in view of Ando, as applied above, and further in view of Parry (US 2002/ 0173968).

Aoyama discloses the feature of more than one lyric set, as described above. Aoyama, as modified by Ando, does not disclose containing lyrics data in an audio file. Parry teaches the feature of encoded audio files having embedded printable lyrics (Paragraph [0001]). Parry also teaches that the lyrics may either be embedded in the audio file or stored in another file (Paragraph [0008]). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Parry into the invention of Aoyama, as modified by Ando, in order to simplify the

complexity of the system by having a single storage space for an audio file containing lyric data, as opposed to two separate storage locations for audio data and lyric data.

8. **Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama in view of Ando et al., as applied above, and further in view of Tashiro et al. (US 5,654,516).**

With regard to claim 4, Aoyama discloses the feature of more than one lyric set, as described above. Aoyama, as modified by Ando et al., does not disclose a plurality of lyric data segments, each of which corresponds to a particular time period of the audio file. Tashiro et al. teach a karaoke system, in which "the word track is divided into time-sequential sections of A1, A2, ...AN, the accompaniment track is likewise divided into time-sequential sections of B1, B2, ...BN, and the digital voice track is likewise divided into time-sequential sections of C1, C2, ...CN. Then, as shown in the FIG. 5(b) format, the first sections A1, B1 and C1 are collected from the respective tracks to compose a first track" (Col. 9, lines 1-9, see also Figs 5a-b). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Tashiro et al. into the invention of Aoyama in order to provide a karaoke system in which the lyrics are displayed in the order in which they are sung in the song, to allow the singer to sing the lyrics at the appropriate speed.

With regard to claim 5, Aoyama discloses the feature of more than one lyric set, as described above. Aoyama does not disclose lyric segments containing time codes corresponding to particular lyric segments. Tashiro teaches, "The word track is

composed of a time-sequential arrangement of character codes effective to display the song word." (Col. 11, lines 14-16). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Tashiro et al. into the invention of Aoyama in order to provide a karaoke system in which the lyrics are displayed in the order in which they are sung in the song, to allow the singer to sing the lyrics at the appropriate speed.

With regard to claim 6, Aoyama does not disclose displaying a particular lyric segment during playback of the audio file based on a current time code. Tashiro teaches, "the monitor displays the song words and the background picture associated to the requested karaoke song to assist in the vocal performance of the singer." (Col. 4, lines 43-47). Tashiro also teaches, "The word characters are variably displayed by the monitor such that a color of the displayed words is sequentially changed in synchronization with progression of the song so as to teach the player vocal timings." (Col. 8, lines 25-28). Tashiro also teaches, "The word track is composed of a time-sequential arrangement of character codes effective to display the song word." (Col. 11, lines 14-16). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Tashiro et al. into the invention of Aoyama in order to provide a karaoke system in which the lyrics are displayed in the order in which they are sung in the song, to allow the singer to sing the lyrics at the appropriate speed.

9. Claims 15-17, 19, 21, 23-28, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klappert et al. (US 5,649,234) in view of Aoyama (JP04013288A), and further in view of Baker (US 2005/0162551).

With regard to claim 15, Klappert et al. disclose a "Method and apparatus for encoding graphical cues on a compact disc synchronized with the lyrics of a song to be played back" (See Title). Klappert et al. disclose identifying lyric segments associated with the audio file, as well as assigning a time code to each lyric segment, wherein each time code identifies a temporal location within the audio file (See Fig. 3). Regarding the limitation of saving time codes and lyric segments, the invention of Klappert et al. is described as "a method and apparatus for simplifying the steps needed to produce a graphical cue to words being displayed as they are to be sung by a performer such as in Karaoke. The production of a CD-Graphics (CD-G) product containing compact disc ("CD") audio accompanied with a visual presentation of the lyrics is facilitated." (See Abstract) Thus the lyric and time code segments are saved on a compact disc. Klappert et al. do not disclose associating a language and a sublanguage with the lyric segments, the sublanguage identifying a country/region dialect of the language. Aoyama discloses implementing different languages, including different variations of the same language (two forms of Japanese), as described above (See Abstract). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Aoyama into the invention of Klappert et al. in order to provide a karaoke system in which the lyrics may be displayed in a plurality of languages.

Klappert, as modified by Aoyama, does not specifically disclose regional dialects of a language. Baker teaches a closed-captioning system in which a plurality of regional dialects may be used for captioning. Baker teaches that implementing this feature would merely require adding captions to a caption database (Paragraph [0015]). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Baker into the invention of Klappert, as modified by Aoyama, in order to provide a karaoke system that is not only capable of showing lyrics in two forms of a language, but also in different regional dialects as well. Although the system of Baker does not show the use of regional dialect-specific captioning within a karaoke application, Baker teaches that such a feature is commonly used to provide text on a screen in for users with different regional dialects. Given this teaching it is clear that regional dialect-specific captioning, for the purpose of allowing a user to view text in a specific dialect, was well known at the time of applicant's invention. Given this, one of ordinary skill in the art seeking to provide a user of a karaoke device supporting multiple languages, such as the one of Klappert, as modified by Aoyama, the advantage of having regional dialect-specific captioning, would have been motivated to seek the outside source as a solution to the problem.

With regard to claim 16, Klappert et al. disclose displaying time codes and corresponding lyric segments (See Fig. 3).

With regard to claim 17, Klappert et al disclose editing one or more time codes. (See Figs 1c, 3a-c).

With regard to claim 19, Klappert et al. disclose a "song.tga" file, which is "the graphic image of the song lyrics" (Col. 3, lines 10-11). With regard to the audio storage, Klappert et al. disclose, "The digitized audio is stored to disk in a file as song.kiff.audio." (Col. 12, lines 49-50).

With regard to claim 21 Klappert et al. do not disclose associating a language with lyric segments. Aoyama teaches association of language with lyrics, as described above. It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Aoyama into the invention of Klappert et al. in order to make a karaoke system capable of being used by people who speak different languages.

With regard to claims 23 and 31, Klappert et al. disclose a "program that runs on PC 56 that builds the initial version of the song.kif file." (Col. 4, lines 1-2, See also Figs. 2a-b).

With regard to claim 24, and the limitation of static lyrics associated with an audio file, Klappert et al. disclose a "song.tga" file, which is "a visual representation of the lyrics as they will appear on a CRT. Essentially, the data in the file is a binary image of the lyrics including font and style. The file is in a graphics format known as Truevision or TGA." (Col. 2, lines 4-8).

With regard to the limitation of the separation of the static lyrics into segments, see Figs. 1e and 3a-c. With regard to the limitation of assigning a time code to each of the lyrics segments, wherein each time code identifies a temporal location within the

audio file, see Figs. 3a-b. With regard to the limitation of saving the time codes and the corresponding lyric segments, Klappert discloses this feature, as described above.

Klappert et al. do not disclose associating a language and a sublanguage with the lyric segments, the sublanguage identifying a country/region dialect of the language.

Aoyama discloses implementing different languages, including different variations of the same language (two forms of Japanese), as described above (See Abstract). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Aoyama into the invention of Klappert et al. in order to provide a karaoke system in which the lyrics may be displayed in a plurality of languages. Klappert, as modified by Aoyama, do not specifically disclose the feature of allowing the user to select among regional dialects. Baker teaches this feature, as described above (Paragraph [0015]). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Baker into the invention of Klappert, as modified by Aoyama, in order to provide a karaoke system that is not only capable of showing lyrics in two forms of a language, but also in different regional dialects as well.

With regard to claim 25, Klappert et al. disclose a "song.tga" file containing the lyrics, as described above.

With regard to claim 26, Klappert et al. disclose a "Playback Monitor" (See Fig. 2a), which is one of the "components used to create and playback a file which contains visual cues to lyrics." (Col. 1, lines 51-53). The person singing the lyrics would have to

see each segment for approximately the same amount of time in order to proceed through the song without getting behind or ahead of the tempo.

With regard to claims 27 and 28, see Klappert, Figs. 3a-c.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klappert et al. in view of Aoyama and Baker, as applied above, and further in view of Parry (US 2002/ 0173968).

Klappert et al., as modified by Aoyama and Baker, do not disclose containing lyrics data and time segments in an audio file. Parry teaches encoding lyrics into an audio file, as addressed above in the rejection to claim 2. It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Parry into the invention of Klappert et al., as modified by Aoyama and Baker, in order to simplify the complexity of the system by having a single storage space for an audio file containing lyric data, as opposed to two separate storage locations for audio data and lyric data.

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klappert et al. in view of Aoyama and Baker, as applied above, and further in view of Sitrick et al. (US 2003/0100965).

Klappert et al., as modified by Aoyama and Baker, do not disclose caching lyric segments and time codes if the audio file is currently in use. Sitrick et al. teach "Electronic music stand performer subsystems and music communication methodologies" (See Title) containing a "performer subsystem," which "provides for

caching and buffering of the music data" (See Paragraph [0158]). Sitrick et al. also teach, "The caching and buffering eliminates the delays that would be incurred in going to and from slower large storage such as hard disk or Flash RAM or CD-ROM, to higher speed RAM, by pre-loading a portion (the cache) of the higher speed memory (e.g., RAM) in accordance with defined cache management for use by the processor in the performer subsystem." (See Paragraph [0158]) It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Sitrick et al. into the invention of Klappert et al., as modified by Aoyama and Baker, in order to improve the performance of the system by storing lyric data in temporary storage while the corresponding audio file is played.

11. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klappert et al. in view of Aoyama and Baker, as applied above, and further in view of Qian et al.

Klappert et al., as modified by Aoyama and Baker, do not disclose saving time codes and audio segments in the audio file. Qian et al. teach this feature, as previously described (See Abstract) It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Qian et al. into the invention of Klappert et al., as modified by Aoyama and Baker, in order to save storage space by storing lyric data and audio data in the same file.

12. Claims 32, 33 and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tashiro et al. (US 5,654,516) in view of Ostrover et al. (US 5,469,370).

With regard to claim 32 and the limitation of receiving a request to play an audio file, Tashiro et al. disclose a karaoke system which plays a karaoke song according to a request command (Col. 2: 7-10). With regard to the limitations of a preferred and alternate language for displaying lyrics, Tashiro et al. disclose that a song may contain three different lyric sets. Tashiro gives an example which includes Japanese, another language, and even a parody word track (Col. 10, lines 35-45). Thus Tashiro discloses the possibility of either having just one set of data tracks (Fig. 5a), or having multiple sets of data tracks and, by extension, multiple languages (Fig. 7). With regard to the languages being arranged in a hierarchical list of language priorities, Tashiro discloses that arrangement "No. 1" represents the "regular" language, "No. 2" represents a foreign language, and "No. 3" represents a parody track (Col. 10: 39-54).

Tashiro does not disclose identifying an alternate language when the lyric set is unavailable in the preferred language. Ostrover et al. teach a system and method which can be used with karaoke applications (Col. 2: 38-40). Ostrover et al. teach the feature of displaying alternate subtitle languages if a primary, or default, language is not available (Col. 25: 28-32; See Fig. 5B). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Ostrover et al. into the

invention of Tashiro et al. in order to provide a list of alternate languages, if the primary language is not available.

With regard to claim 33, Tashiro et al. disclose an example in which the song data involves three word tracks, with the first in Japanese, the second in another language, and the third in Japanese parody lyrics (Col 10, lines 35-40). By using the phrase "for example", Tashiro et al. leave open the possibility that the first language in track 1 could be English.

With regard to claim 35, Tashiro et al. disclose, "the initial Japanese language words can be switched to foreign language words in the middle of the karaoke performance." (Col. 11, lines 34-37).

With regard to claim 36, Tashiro et al. disclose a karaoke system, which "sounds a karaoke song" (See Abstract). With regard to the limitation of a time code associated playback location, Tashiro et al. disclose a multimedia sequencer, which can "execute in real time basis a multiple of events of plural tracks contained in one song data in synchronization with each other under the software control." (Col. 11, lines 47-50).

With regard to the limitation of associating lyric segments with time codes, Tashiro et al. disclose, "the word track is divided into time-sequential sections of A1, A2, ...AN, the accompaniment track is likewise divided into time-sequential sections of B1, B2, ...BN, and the digital voice track is likewise divided into time-sequential sections of C1, C2, ...CN. Then, as shown in the FIG. 5(b) format, the first sections A1, B1 and C1 are collected from the respective tracks to compose a first track." (Col. 9, lines 1-7).

With regard to the display of lyric segments corresponding to the song, Tashiro et al. disclose a "video unit for displaying background pictures and word characters along with the reproduction of the karaoke song" (Col. 1, lines 26-28).

With regard to claim 37, Tashiro et al. disclose computer-readable memory containing a program (See "Program ROM" in Fig. 17), and a processor (See "CPU" in Fig. 17).

13. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tashiro et al. in view of Ostrover et al., as applied above, and further in view of Parry (US 2002/ 0173968).

Tashiro et al., as modified by Ostrover et al., do not disclose containing lyrics data in an audio file. Parry teaches the feature of encoded audio files having embedded printable lyrics (Paragraph [0001]). Parry also teaches that the lyrics may either be embedded in the audio file or stored in another file (Paragraph [0008]). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Parry into the invention of Tashiro et al. in order to simplify the complexity of the system by having a single storage space for an audio file containing lyric data, as opposed to two separate storage locations for audio data and lyric data.

14. Claims 38, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al. (US 5,194,682) in view of Ando et al.

With regard to claim 38, and the limitation of an audio player, Okamura et al. disclose a sound source unit (Col. 2: 15-22).

With regard to the limitation of a language selection module for searching a list of lyric sets associated with the audio file to determine whether a lyric set is available in a preferred language, and to identify an alternate lyric set to be displayed based on a hierarchical list of language priorities when the search by the language selection module indicates that the lyric set is unavailable in the preferred language, Okamura et al. disclose an operation unit with which the user may select a language from a plurality of languages. Okamura et al. disclose that the lyrics may be English, Japanese, or even a parody lyric set. (Col. 14, lines 63 - Col. 15: 15). Okamura et al. do not disclose indicating that a lyric set is unavailable in the preferred sublanguage. Ando et al. teach a device usable in karaoke applications (Paragraph [0002]). Ando et al. teach the feature of a warning display indicating that a language is unavailable (Paragraphs [0120 - 0123]; Item 101c in Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Ando et al. into the invention of Okamura et al. in order to provide an indication to the user that a language is unavailable. This way, if the user selects a language which turns out to be unavailable, the user is alerted to this fact. Otherwise, the user might not see any lyrics, and assume that there is a malfunction in the device.

With regard to the limitation of a lyric display module, Okamura et al. disclose this feature (Col. 9, lines 65-69).

With regard to claim 39, and the limitation of the lyric display module displaying different lyric segments of the alternate lyric set based on a portion of the audio file

being played by the audio player, Okamura et al. disclose "The status of the scroll map data is COh, and data is two bytes of [Scroll Speed] and [Lyrics Count]. The number of characters of [Lyrics Speed] is scrolled at a speed of the musical note of [Scroll Speed] per each character." (Col. 11, lines 3-7). Thus the lyrics are presented in synchronization with the music.

With regard to claim 41, Okamura et al. disclose "Further, data of two languages or a parody of a song, etc. can be stored into the areas of LF6 to LF13." (Col. 11, lines 12-15). Okamura et al. also disclose, "Further, in the case where a plurality of lyrics data are included in the lyrics file LF (for example, in the case of lyrics of two languages or more)..." (Col. 14, lines 60-65). Thus Okamura et al. disclose a specific location for the language.

15. **Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al. in view of Ando, as applied above, and further in view of Parry (US 2002/ 0173968).**

Okamura et al. do not disclose containing lyrics data in an audio file. Parry teaches encoded audio files having embedded printable lyrics. Parry also teaches, "the printable lyrics are either embedded in the audio file or stored in another file." (See Abstract) It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Parry into the invention of Okamura et al. in order to simplify the complexity of the system by having a single storage space for an

audio file containing lyric data, as opposed to two separate storage locations for audio data and lyric data.

16. **Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al. in view of Ando, as applied above, and further in view of Tashiro et al. (US 5,654,516).**

Okamura et al. disclose the feature of using lyrics in more than one language, as described above. Okamura et al. do not disclose the limitation of a lyric data editor to edit the alternate lyric set associated with the file. Tashiro et al. teach, "the host station 30 can manage change and addition of the fonts, while the karaoke system does not need an extra font ROM. Consequently, not only the font of the same language word can be changed in terms of letter size, letter type and else" (Col. 11, lines 29-34) Thus the karaoke system of Tashiro et al. teaches the limitation of editing lyrics via the "host station". It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Tashiro et al. into the invention of Okamura et al. in order to give the user of the system more flexibility and control over how and what lyrics are displayed.

17. **Claims 43-46 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qian et al. in view of Aoyama.**

With regard to claim 43 and the limitation of a means for identifying an audio file to play, Qian discloses this feature, as described above. With regard to the limitation of a means for identifying lyric segments associated with the audio file,

wherein each lyric segment has an associated time code, and wherein the time codes identify periods of time during playback of the audio file, Qian discloses this feature, as described above. With regard to the limitation of a means for playing the audio file and displaying a lyric segment that corresponds to the current time code, Qian discloses this feature, as described above. Qian et al. do not disclose associating a language and a sublanguage with the lyric segments, the sublanguage identifying a country/region dialect of the language. Aoyama teaches implementing different languages, including different variations of the same language (two forms of Japanese), as described above. It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Aoyama into the invention of Klappert et al. in order to provide a karaoke system in which the lyrics may be displayed in a plurality of languages.

Qian, as modified by Aoyama does not specifically disclose regional dialects of a language. Baker teaches a closed-captioning system in which a plurality of regional dialects may be used for captioning. Baker teaches that implementing this feature would merely require adding captions to a caption database (Paragraph [0015]). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Baker into the invention of Qian, as modified by Aoyama, in order to provide a karaoke system that is not only capable of showing lyrics in two forms of a language, but also in different regional dialects as well. Although the system of Baker does not show the use of regional dialect-specific captioning within a karaoke

application, Baker teaches that such a feature is commonly used to provide text on a screen in for users with different regional dialects. Given this teaching it is clear that regional dialect-specific captioning, for the purpose of allowing a user to view text in a specific dialect, was well known at the time of applicant's invention. Given this, one of ordinary skill in the art seeking to provide a user of a karaoke device supporting multiple languages, such as the one of Qian, as modified by Aoyama, the advantage of having regional dialect-specific captioning, would have been motivated to seek the outside source as a solution to the problem.

Regarding claim 44, Qian et al. disclose project properties including "setting the language, group number, title or song, album title, artist name, etc." (See Paragraph [0072]; see also Fig. 8b). Qian et al. do not disclose allowing the user to select a sublanguage. Aoyama teaches this feature, as described above. It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Aoyama into the invention of Klappert et al. in order to provide a karaoke system in which the lyrics may be displayed in a plurality of languages.

With regard to claim 45, Qian discloses storing the lyric segments in the audio file, as described above (claim 8).

With regard to claim 46, Qian et al. disclose, "a graphical user interface method for a program readable machine embodying a program of instructions executable to permit the synchronization of multimedia files with an audio file to create a single encoded audio bit stream with synchronized multimedia files." (See claim 8). Qian et

al. disclose the ability to receive a request to play an audio file via menu options (See Fig. 2f). Qian et al. disclose a language associated with the lyrics, as described above. Qian et al. disclose identifying a plurality of lyric segments associated with the audio file, wherein each lyric segment is associated with the preferred language and each lyric segment has an associated time code, and wherein each time code identifies a time during playback of the audio file that a corresponding lyric segment is displayed, as described above. Qian et al. disclose playing the audio file and displaying the appropriate lyric segments as the audio file is displayed, as described above. Qian et al. do not disclose associating a sublanguage with an audio file. Aoyama teaches implementing sublanguages, as described above. It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Aoyama into the invention of Klappert et al. in order to provide a karaoke system in which the lyrics may be displayed in a plurality of languages. Qian, as modified by Aoyama, do not specifically disclose the feature of allowing the user to select among regional dialects. Baker teaches this feature, as described above (Paragraph [0015]). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Baker into the invention of Qian, as modified by Aoyama, in order to provide a karaoke system that is not only capable of showing lyrics in two forms of a language, but also in different regional dialects as well.

Regarding claim 48 and the limitation of computer-readable media, Qian et al. disclose, "the computer system being used to implement the enhance encoder functions or retrieved from the Internet." (See Paragraph [0062])

18. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Qian et al. in view of Aoyama, as applied above, and further in view of Okamura et al. (US 5,654,516).

Qian et al., as modified by Aoyama, do not disclose the limitation of an alternate language. Okamura et al. teach, "Further, data of two languages or a parody of a song, etc. can be stored into the areas of LF6 to LF13. It is to be noted that such data are not stored when they are not used." (Col. 11, lines 12-15). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Okamura et al. into the invention of Qian et al., as modified by Aoyama, in order to give the user additional languages in which to view the lyrics.

Response to Arguments

19. Applicant has presented arguments that the prior art doesn't teach newly added features presented in the newly amended claims 1, 32, and 38 (pp. 15-16, regarding claims 1, 3, 8; pp. 19-20, regarding claims 38, 39, 41; pp. 30-31, regarding claims 32-37). Each of the features of the currently pending claims has been specifically shown to be present in the prior art, as shown in the rejection of the claims above.

20. Applicant's argument, with respect to claims 7, 15, 24, and 43, that Aoyama does not read on the feature wherein the sublanguage identifies a regional dialect, is found to be persuasive. Therefore, the finality of the previous office action is hereby withdrawn. Applicant has used the phrase "country/region dialect" in claims 15, 24, 43, and 46. The examiner has interpreted this phrase as having the same meaning as "regional dialect", as recited in claim 7.

21. In response to applicant's argument that Qian does not disclose handling a jump request as described in claim 9, the examiner respectfully disagrees. Applicant argues that Qian does not show receiving a request to jump to a different part of the audio file, then playing that part of the audio file. Examiner asserts that Qian shows this feature. Specifically, Qian discloses that a user can place a cursor to a position of the audio file, after which the audio file jumps to that position. Note that this occurs *while playing* the audio file (Paragraph [0051]). Applicant argues that Qian doesn't show the feature of displaying the first lyric segment until a time during playback of the audio file matches a time code in the different part of the audio file, and then displaying a different lyric segment associated with the time code in the different part of the audio file. The examiner asserts that Qian shows this feature. Specifically, Qian discloses synchronizing lyrics with an audio file (Paragraph [0007]). The lyrics are time stamped to correspond to a position in the wav file. Therefore, when a different portion of the audio file is played, the corresponding lyrics for that portion will be displayed as well. Therefore, the examiner asserts that the reference reads on the claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Crabtree whose telephone number is 571-272-8962. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert P. Olszewski can be reached on (571) 272-6788. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

14

Joshua D. Crabtree
September 29, 2006

KATHLEEN MOSSEY
PRIMARY EXAMINER